

Appl. No.: 10/621,509

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### **AMENDED CLAIMS**

I claim:

1. (Previously amended) A method which enables users with a computer to search, find and contact dates on the Internet in instant messaging networks, comprised of at least the following elements:
  - a. Providing a Client program, located on the User's computer;
  - b. Providing at least one Server, located on the Internet;
  - c. Providing at least one module for filling and/or making changes to a computer dating compatibility questionnaire;
  - d. Providing a search module for finding potential dates which is capable of checking also if said potential dates are currently Online;
  - e. Providing at least one of: enabling the user to search also for dates who are not currently Online, and enabling the user to search for dates based on reciprocal compatibility;
  - f. Providing an Instant Messaging element which knows if users are currently On-line, and also enables instant exchange of messages between users and uses a contactee list.
2. (Previously amended) The method of claim 1 wherein at least one of: the module for filling and making changes to the questionnaire, the search module, and/or the instant messaging element - is part of a custom-made instant messaging client, or is an add-on or plug-in, which is capable of being coupled to at least one client program of at least one existing instant messaging network.

3. (Previously amended) The method of claim 1 wherein the filled questionnaire data is saved on at least one of:
  - a. Locally on the user's computer;
  - b. A dynamic database which contains users' data only as long as said users are Online;
  - c. A dynamic database which contains users' data only as long as said users are Online, but at least the user's unique ID is saved also in a static DB on the server;
  - d. A static database on a server on the Internet, and a user's record is marked as Online as long as the user is Online;
  - e. A static database on a server on the Internet, and a user's record is marked as Online as long as the user is Online, and the user is enabled to search also for persons not currently Online and add said persons to the user's contactee list.
4. (Previously canceled).
5. (Previously canceled).
6. (Previously canceled).
7. (Previously amended) In an Online computer dating system a method of indicating to users of the system matching dates who are currently online differently from matching dates who are not currently online, wherein contactee lists and/or equivalents of contactee lists are used, and wherein the system knows if users are currently online by at least one of:
  - a. An integration with an Instant Messaging (IM) system, as in claim 1;
  - b. For users who gave also an IM id number, the system tries to find out if said users are currently Online, and if so, when showing a potential date's data on a dating search results list, the system shows also the potential date's IM id number, the IM network which said IM id number belongs to, and an indication if said potential date is Online, so that the system enables the user to contact said potential date through the appropriate IM client program;

- c. For users who gave also an IM id number, the system tries to find out if said users are currently Online through an element which contacts the relevant server;
  - d. Being Online is defined as at least one of: 1. A user has logged into the system with the user's user name and password not longer than a certain time ago; 2. A user has performed at least one activity in the system not longer than a certain time ago; 3. The user continues to actively use the Internet browser; 4. A user's computer is connected to the Internet and the user has been active at the computer not longer than a certain time ago;
  - e. Adding instant messaging features to a dating site.
- 8. (Previously amended) The method of claim 7 wherein at least one of the following elements is added to the user's contactee list or equivalent of contactee list near each contactee: Sex, Age, Area, compatibility scores, Last Date and time of Activity, Most frequent activity hours and/or day parts and/or week days, How often the contactee is usually Online, Last Communication date with the user, Number of communications so far with the user, and Dating availability Status.
- 9. (Previously amended) The method of claim 8 wherein the user's contactee list or equivalent of contactee list can be sorted by at least one of the elements listed in claim 8, and said sorting is based on at least one of said elements.
- 10. (Previously amended) The method of claim 7 wherein at least one of the following features exists:
  - a. The system enables the user at least one of the following: Knowing how many other users have said user in said other users' contactee lists or equivalent of contactee lists, Knowing at least the e-mails of these users, and being able to broadcast messages to said users;

- b. The system enables the user to remove said user automatically from the contactee lists or equivalent of contactee lists where said user is listed and/or at least block certain users by at least one of being deleted from said certain users' contactee lists and making the system never let said users know that the user is online;
- c. The system is capable of notifying the user automatically at least for some contactees when said contactees become Online, even when the user is not currently Online;
- d. If the user is not currently Online, the system is capable of notifying the user automatically by SMS and/or by email and/or by phone call and/or by other means when a date becomes online, at least for dates which the user marked as especially important to said user or requested to be especially notified about them.

11. (Previously amended) The method of claim 7 wherein at least one of the following features exist:

- a. The system enables the user to choose in searches at least one of the following search options: a. Reciprocal compatibility Search based on the self descriptions and preferences and importances in the questionnaires of both the user and the potential dates; b. 1-way compatibility search based at least on the data of preferences and importances of the user's questionnaire; and c. Attribute search, based on marking for the search a small number of attributes that are used as necessary conditions or marked with importances and using at least these preferences;
- b. At least in one of the non-reciprocal search options, the user's own self description data is also taken into account at least partially;
- c. The system enables the user to get a list of date-search results that show the most compatible potential dates in descending order of compatibility, and usually near each potential date is marked if said potential date is currently Online, and, if said potential date is not online, at least one of: When was the last time and date said potential

date was Online, When said potential date is most frequently Online, and How often said potential date is usually online;

- d. The system enables the user to get a list of date-search results that show the most compatible potential dates in descending order of compatibility, and usually near each potential date is marked if said potential date is currently Online;
- e. The system enables the user to get a list of date-search results wherein usually near each potential date is marked if said potential date is currently Online, and, if said potential date is not online, at least one of: When was the last time and date said potential date was Online, When said potential date is most frequently Online, and How often said potential date is usually online;
- f. The system enables the user to get a list of date-search results that show the most compatible potential dates, and usually near each potential date is marked if said potential date is currently Online;
- g. In a list of dates with descending order of compatibility, potential dates that are currently Online are marked by at least one of: Special color, Special shape of text, Special size of text, and Special icon;
- h. In a list of compatible dates, potential dates that are currently Online are marked by at least one of: Special color, Special shape of text, Special size of text, and Special icon;
- i. In a list of date search results, potential dates that are not currently online but were recently Online are marked less conspicuously, and potential dates that are not currently Online and also were not recently online are marked even less conspicuously;
- j. The system enables the user to get a list of date-search results that is divided at least into the following sub-lists: A sub-list of currently Online dates, a sub-list of dates that are not currently Online but were recently Online, and a sub-list of dates that are not currently Online and also were not recently Online;
- k. The system enables the user to get a list of date-search results that is divided at least into the following sub-lists and within each sub-list the

dates are ordered by descending compatibility scores: A sub-list of currently Online dates, a sub-list of dates that are not currently Online but were recently Online, and a sub-list of dates that are not currently Online and also were not recently Online;

- l. The system enables the user to get a list of date-search results that is divided at least into the following sub-lists: A sub-list of currently Online dates, and a sub-list of dates that are not currently Online;
- m. The system enables the user to get a list of date-search results that is divided at least into the following sub-lists and within each sub-list the dates are ordered by descending compatibility scores: A sub-list of currently Online dates, and a sub-list of dates that are not currently Online;
- n. If the potential date is not currently Online, the last time and date said potential date was online is listed near said potential date's details;
- o. The system enables the user to send instant messages to potential dates who are currently Online and/or enter chat with said users;
- p. If a user's compatibility scores are generally low beyond a certain criterion, the system is capable of reporting to the user the list of questions that most contributed to the problem;
- q. The system enables pairs of users also to check the exact compatibility between said users.

12. (Previously canceled).

13. (Previously canceled).

14. (Previously canceled).

15. (Previously canceled).

16. (Previously canceled).

17. (Previously amended) The method of claim 7 wherein a systematic data pool of pictures and/or images of males and of females is used, and the pictures are at least one of photographs and systematically drawn images, and the system enables the user to at least one of: mark at least one picture that is most similar

to said user (referred to below as marked self image), and mark the pictures of the opposite sex that said user most likes (referred to below as marked preferred images).

18. (Previously amended) The method of claim 17 wherein at least one of the following features exist:

- a. The pictures are divided at least into facial pictures and body pictures and/or more modular choices and/or combinations are available;
- b. At least one of the info from marking the pictures and info from textual questions on appearance is taken into account while calculating the appearance compatibility;
- c. The info from the textual questions on appearance is taken into account while asking the user to mark the user's own appearance and the appearance of the desired dates, in order to increase efficiency and save time;
- d. The user is asked to make choices in a tree-like manner in order to increase efficiency and save time.

19. (Previously canceled).

20. (Previously canceled).

21. (Currently amended) In an Online dating system, a method wherein the system enables a user to browse through photos of actual opposite sex users, and the system enables a user to request to view photos of additional opposite sex users which are similar to one or more photos of actual opposite sex users which the user likes, and then at least one of the following is done:

- a. The system automatically shows the user photos which are similar to the photos of actual opposite sex users which the user indicated that the user likes;
- b. The system automatically shows the user photos which are similar to the photos of actual opposite sex users which the user indicated that the user

- likes, sorted by descending order of similarity to the photo (or photos) of actual opposite sex users which the user indicated that the user likes;
- c. Similarity to the photo (or photos) of actual opposite sex users which the user indicated that the user likes is taken into account when automatic matching is performed;
  - d. The system automatically shows the user photos which are similar to the photos of actual opposite sex users which the user indicated that the user likes, and the system assumes that the most similar pictures are those which have a highest total similarity score across various dimensions or parameters;
  - e. The system automatically shows the user photos which are similar to the photos of actual opposite sex users which the user indicated that the user likes, and the system searches among available photos for a list of similar photos based on one or more different parameters each time, and then decides according to the user's following responses which dimensions are actually more important for the user;
  - f. The system automatically shows the user photos which are similar to the photos of actual opposite sex users which the user indicated that the user likes, and the system makes automatic analysis of the common features among different pictures which the user marked as most desired – in order to know what parameters are important to the user for determining the similarity.

22. (Previously amended) The method of claim 7 wherein the system is capable of notifying users automatically when someone new fitting at least one criterion has at least one of: Sent said someone's data to the system, Sent said someone's data to the system and is currently Online, and Performed a compatibility search for the first time, and wherein said notification is by at least one of: Sending an appropriate e-mail message to the user, Sending an appropriate instant message to the user, Adding the new dates directly into the user's contactee list or equivalent of contactee list, Automatic phone call to the user, Sending an SMS message to the user, Adding the new compatible date



automatically to the user's contactee list or equivalent of contactee list, and  
Adding the new compatible date automatically to the user's contactee list if the  
new date is especially highly matching.

23. (Previously canceled).

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41. (Previously canceled).

42. (Previously canceled).

43. (Previously canceled).

44. (Previously canceled).

45. (Previously canceled).

46. (Previously amended) The method of claim 7 wherein for determining if the  
user is still Online without having to send short message every certain interval,  
at least one of the following methods is used:

- a. The client software creates a hook or interface with the communication software which the user's computer uses to connect to the internet and/or with the routines that are activated when the OS (Operating System) is shut down so that when the user closes the client software and/or the Internet connection and/or shuts down properly the OS, the client software is capable of sending to the relevant server a message that the user has logout out before letting the connection to actually be closed;
- b. The relevant server is automatically informed by other IM clients if said other IM clients try to reach a client that is considered Online but don't succeed and thus the relevant server can assume that that IM client is no longer Online;
- c. If the relevant server does not succeed in communicating with a client, the server can assume that the client is no longer Online;
- d. If the server and/or other clients receive communications from a client that was considered to be offline, clients which received said communication report said communication to the server and the server updates the client's status to Online.

47. (Previously amended) The method of claim 7 wherein when dealing with people not currently Online the system automatically tries to come up with a list of most compatible dates who are most recent, and if the compatibility scores of said dates are not high enough and/or the list is not long enough, the system automatically decides to create instead a list containing also people who are less recent and so on in one or more steps, until the list is long enough and/or the compatibility scores of the compatible dates are high enough and/or the recency compromise has reached backwards enough.

48. (Previously amended) The method of claim 7 wherein if the user did not answer some questions, the system handles the unanswered questions by at least one of:

- a. Taking into account average answers or most frequent answers in each question that the user did not answer;
- b. Taking into account also correlations of each missing answer with other answers;
- c. Giving a lower score for matching on missing values.

49. (Previously amended) The method of claim 17 wherein when there is no direct match between the marked self image of the potential date and the user's marked preferred images, or vice versa, the system takes into account also the distance or similarity between the marked preferred images and the actual image, wherein said actual image is the marked self image or an actual photo supplied by the potential date or by the user, and at least one of the following features exists:

- a. Said distance or similarity analysis is based on systematic classification of the images according to various variables;
- b. Said actual image is the image or images that were marked by the potential date as most similar to said potential date or marked by the user as most similar to the user;
- c. Various parameters of each image are coded in advance as numeric data so that no actual image analysis is done during the compatibility search;
- d. If the potential date or the user submitted also an actual photo then the system is capable of doing analysis of distance or similarity in addition or instead on the actual photo of the potential date.

50. (Previously amended) The method of claim 7 wherein if the user browses through photos of actual opposite sex users, the system enables the user to request to view photos that are similar to one or more photos of actual opposite sex users that the user likes, and then at least one of the following is done:

- a. The system automatically shows the user similar photos;
- b. The system automatically shows the user similar photos, sorted by descending order of similarity to the photo (or photos) which the user indicated that the user likes;

- c. Similarity to the photo (or photos) which the user indicated that the user likes is taken into account when automatic matching is performed;
- d. The system automatically shows the user similar photos, and the system assumes that the most similar pictures are those which have a highest total similarity score across various dimensions or parameters;
- e. The system automatically shows the user similar photos, and the system searches among available photos for a list of similar photos based on one or more different parameters each time, and then decides according to the user's following responses which dimensions are actually more important for the user;
- f. The system automatically shows the user similar photos, and the system makes automatic analysis of the common features among different pictures which the user marked as most desired – in order to know what parameters are important to the user for determining the similarity.

51. (Previously amended) The method of claim 21 wherein photos of actual users are automatically analyzed in advance after the users submit said photos according to various parameters in order to convert said photos into numerical codes, so that during compatibility search and/or during searching for similar photos only these numerical codes are used.

52. (Previously amended) The method of claim 17 wherein at least one of the following features exists:

- a. The system enables the user to request to browse photos of actual users that are similar to any of the photos and/or images from the systematic data pool that the user marked as desirable, and then the system automatically shows the user such photos and/or shows the user such photos sorted by descending order of similarity to the photo (or photos) which the user indicated that the user likes;
- b. If a user submits an actual photo the system is capable of automatically analyzing said actual photo in order to correct marking by the user about how similar the user is to photos of the systematic pool of images.

53. (Previously amended) The method of claim 7 wherein the user is shown a list of compatible dates, and the mark that indicates if someone is currently online and/or an indication of dating availability status of dates is automatically updated also on the list of compatible dates at least if the user saves said list or keeps at least one window of said list open.

54. (Previously amended) The method of claim 7 wherein dynamic web pages are used and for updating the indication if dates are currently Online on the results list and/or for faster instant messaging through the browser which the user uses to access the Internet, at least one of the following features is used:

- a. A refresh command is initiated automatically by the site when there is a change in the page, so that the browser can get a refresh even if the browser didn't ask for said refresh;
- b. The browser asks for refresh more often, but if nothing has changed then the browser gets just a code that tells the browser to keep the current page or window as is;
- c. When the refresh is sent, said refresh is a smart refresh, which tells the browser only what to change on the page instead of having to send the entire page again.

55. (Previously amended) The method of claim 22 wherein instead of sending the notification as soon as possible after the new someone becomes available, the system waits until one or more such highly compatible dates become available and if one or more such highly compatible dates become available then the notification is sent immediately, otherwise the system waits a certain time limit, and if no additional highly compatible dates that meet the at least one criterion become available, then the message is sent anyway.

56. (Previously presented) The method of claim 7 wherein at least one of the following features exists:

- a. If the potential date is not currently Online, at least one of the following is usually indicated near said potential date's details in the list of date search results: When said potential date is most frequently Online, and How often said potential date is usually online;
- b. At least one of the following is usually indicated near each contactee in the contactee list or equivalent of contactee list: When said contactee is most frequently Online, and How often said contactee is usually online.